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ENEWETAK RADIOLOGICAL SUPPORT PROJECT

Over the past few months we have had several conversations regarding the role of the DOE Enewetak Project Manager. Of specific concern to me at this time is the role of the Project Manager as a participant in the DNA decision-making process. My concern has become acute because of two recent occurrences:

1. Our early November discussion with Hal Hollister, wherein he expressed disagreement with my philosophy of participation.

2. A recent request received by John Stewart (currently acting for me as Deputy Project Manager on site) that he concur in the establishment of the detailed cleanup objective for one of the Northern islands, Lujor.

In this paper I describe what I visualize as the appropriate mechanism and sequence of decision and the DOE Project Manager's role. I know that this scenario is at variance with what some others both in DNA and in our Headquarters expect; but it is the product of almost six years of study of, and experience with, the Enewetak situation, and of many tens of hours of argument, debate, and soul searching. I believe that each of my six Project Management Deputies feels completely free to disagree with me and to express his disagreement. Yet I believe that you will find unanimous agreement with the concept herein described, by these seven senior people (including myself) who are closest to the issue and who each must individually represent the Department of Energy during rotational on-site tours.

Let me first review a few of the "givens" in the cleanup program. First, by its very nature, the scope and magnitude of the program are ill-defined, and will remain so until we are well into the actual implementation. It was for this reason that I suggested in 1972 that

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at least initially it might be more reasonable to authorize a "level of effort" program rather than to try to define and design and schedule as one might in a more conventional engineering job. Second, and perhaps the most important given, is the fact (and it is fact) that there is no way that Enewetak can be restored radiologically to the Atoll that it once was. With the limited resources that have been made available, there will of necessity be tasks left undone and conditions left unimproved. Many compromises with desired standards will be required, many trade-offs will be examined. Third, and finally, overall responsibility for the cleanup of Enewetak has been squarely placed upon the Director, DNA. His must be the decisions, and it is he who must answer to the Congress for the rationale of decision, the stewardship of resources, and of course, the end product—the condition of Enewetak when the project is complete. Our role, as I have repeatedly said to both the Director DNA and the Commander, Field Command, is to assist the responsible agent of the Director (the Commander of the Joint Task Group) in assessing the radiological component of his decisions. Note that the decisions which this paper addresses have to do exclusively with the removal of soil which is contaminated with transuranic elements.

At this time we have only a gross picture of the surface concentrations for most of the islands of Enewetak. We are acquiring more detailed information, island by island; and DNA hopes, in the very near future, to commence soil removal. The guidance for soil removal provided by the AEC in 1974, is admittedly just that--general guidance. It recommends soil removal wherever a concentration of 400 pCi/gm or greater is found; it accepts concentrations below 40 pCi/gm as requiring no action; and it provides for a "case-by-case" determination in the range between 40 and 400. It is really this case-by-case determination which becomes the issue, for the DNA command authorities have chosen to consider the "above 400" criterion as direction rather than guidance; and, thus, the removal of all soil exceeding that criterion as the sine-qua-non of a successful cleanup. Many (perhaps most) of the informed DOE observers have disagreed with such a literal application of the guidance; but again, Director, DNA, has the mandate and the "monkey."

When one looks at the portion of the task which the Commander, Field Command, chooses to term "discretionary"--that is, soil removal in the 40-400 range--it is apparent that it will be a major consumer of resources and will likely have the greatest impact upon resettlement options. It is generally accepted that (other conditions being equal) the potential usefulness of an island will be in inverse proportion to the average concentration of transuranics remaining after cleanup. Thus, an island which has been brought to below 40 pCi/gm may be

considered acceptable for permanent residence; one which is below 100 pCi/gm may be intensively farmed; and one which exceeds 100 pCi/gm may have limited usefulness.

But other conditions are not equal. As we have seen at Bikini, the distribution of land rights and cultural considerations, among other things, are in conflict with the purely radiological considerations. And at Enewetak, Engebi--if it had no transuranics in the soil--would likely be relegated for sometime to limited use. Yet it is very important to the identity and well-being of the Engebi people. Size, configuration, approaches, orientation to wind and spray--these are some of the other factors to be considered. Most of all, with limited resources, the Task Group Commander should consider the Atoll as a whole. "Case-by-case" consideration of the resources to be applied to one island must include consideration of what else might be done with those same resources applied elsewhere. And so, the people of Enewetak must, in some way, participate in that deliberation.

The Task Group Commander will never have enough information to accurately quantify all of the sub-tasks in advance. But he is under considerable pressure to start using, to the fullest, the cleanup forces that have been provided him. And only he can decide when he has sufficient information upon which to act. If I were in that role, I should try at the earliest possible date to develop two ordered lists of islands. The first would order them as to the relative amount of effort required to bring each to its desired condition (more than one condition might be considered for some islands). The second ordering would be with respect to the potential value or usefulness of an island. With these two lists in hand, a first approximation of the distribution of effort should be developed. Both lists, and therefore planned distribution of effort, will change as more and more information becomes available; and so the Task Group Commander's detailed cleanup objectives should be considered flexible. Each objective will be expressed as a level of soil contamination (or maximum concentration) which will remain in a given area after cleanup action is complete. We should anticipate that he may change his objective to a higher or a lower number as the scope unfolds.

The DOE Project Manager will participate in decision-making in basically three ways: He will furnish a detailed radiological description of the area or island being considered; he will provide to the Commander, and continuously update, an estimate of the quantity of material to be removed in order to meet a given objective; and he will assist the representative of the people of Enewetak to understand the need for, and the significance of, their participation.

Much has been said, but too few words have been written about Certification. With your concurrence, I wrote Jim Liverman on November 11, 1977, proposing a format for Certification. I have not had a response to that letter, but I am aware that it is under consideration by OES. I have not changed my view that the Certification provided by the Project Manager should be documentation of the condition in which each island is left, rather than a judgement as to whether that was the appropriate thing for the Defense Department to do. Any such judgement would necessarily contemplate the entire cleanup effort, rather than each individual island as a separate entity. Yet DNA insisted upon, and ERDA agreed to, an "island-by-island" Certification (see Liverman-Shedd MOU of September 1975). Someone at some level in one of our departments must have the authority to make the day-to-day cleanup decisions. In my view, that is clearly the Task Group Commander. The DOE Project Staff is a part of his Task Group and is committed to assisting the Commander with advice and technical support. We have devoted a great deal of energy over the past few years to helping DNA to interpret the AEC guidance for cleanup. If a judgement is now to be made as to whether DNA has adequately followed the guidance, I believe that that judgement should come from some independent appraiser or from the authors of the guidance themselves.

Permit me one final point. Be assured that neither I nor any of my deputies will hesitate to argue with the Task Group Commander if we have views that are at variance with his. Nor will we hesitate to notify you of differences which we cannot resolve. But until otherwise instructed and empowered, I intend that our project role continue to be support.

Roger Ray, Project Manager
Enewetak Radiological Support Project